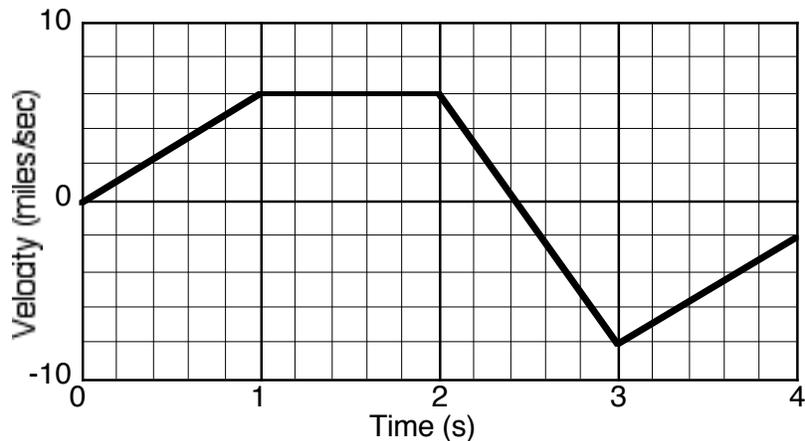
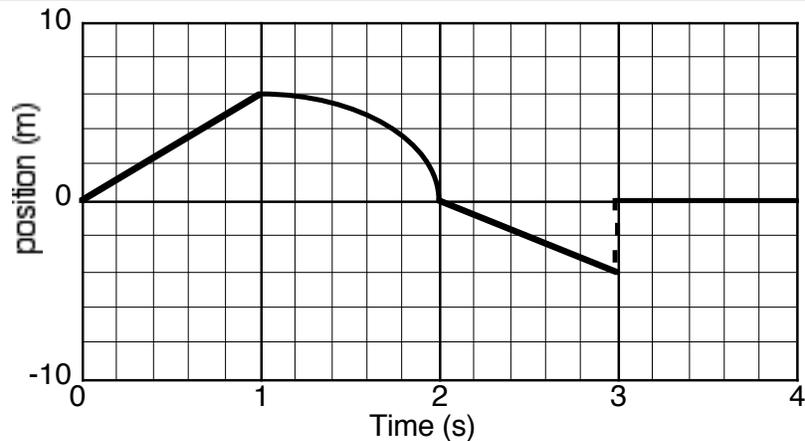


# Kinematics Graphs Worksheet

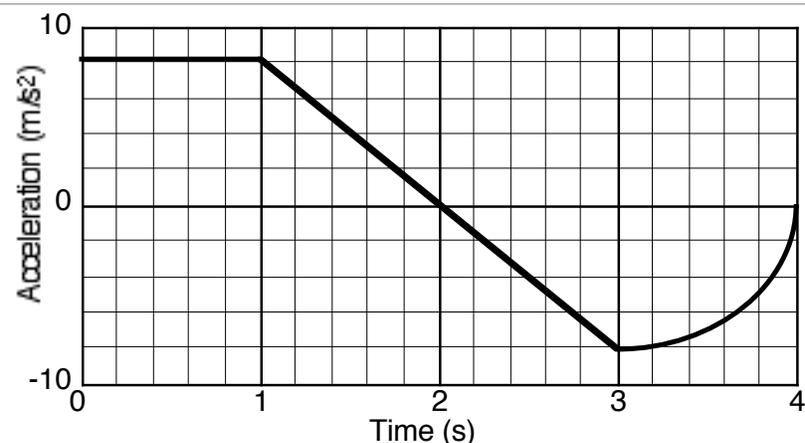
## Interpreting Graphs



100. Which single second time interval(s) contains the greatest positive acceleration?
101. Which single second time interval(s) contains the greatest negative acceleration?
102. Which single second time interval(s) contains the greatest positive velocity?
103. Which single second time interval(s) or point in time contains the greatest negative velocity?

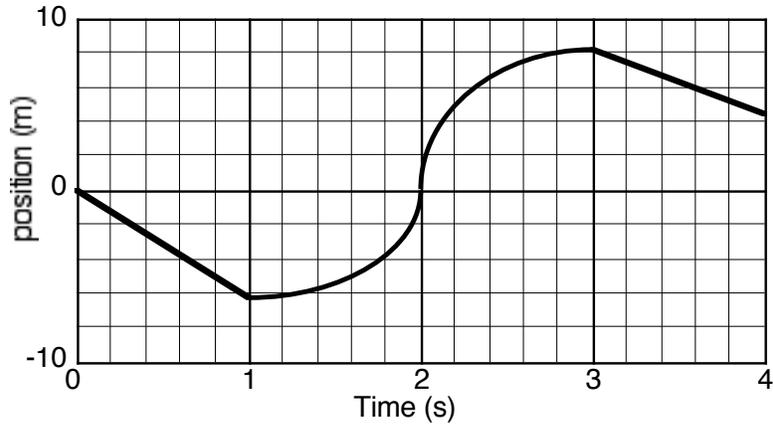


104. Which single second time interval(s) contains the greatest positive acceleration?
105. Which single second time interval(s) contains the greatest negative acceleration?

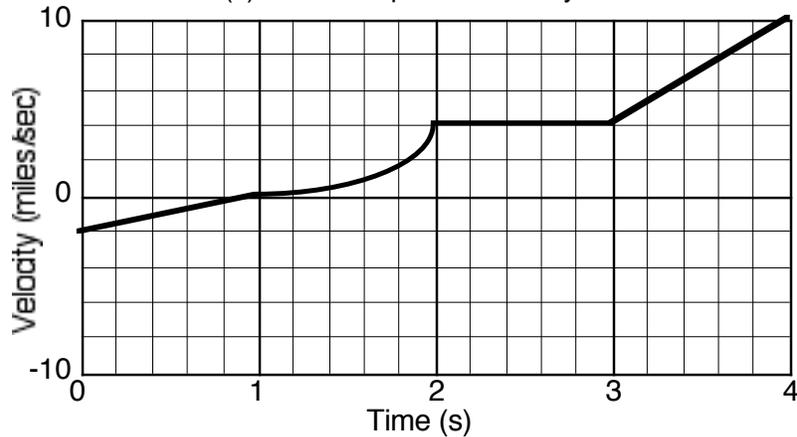


106. What is the jerk at 2 seconds?
107. Which single second time interval(s) shows a changing jerk?
108. Which single second time interval(s) shows a constant acceleration?
109. Which single second time interval(s) contains a constant jerk?

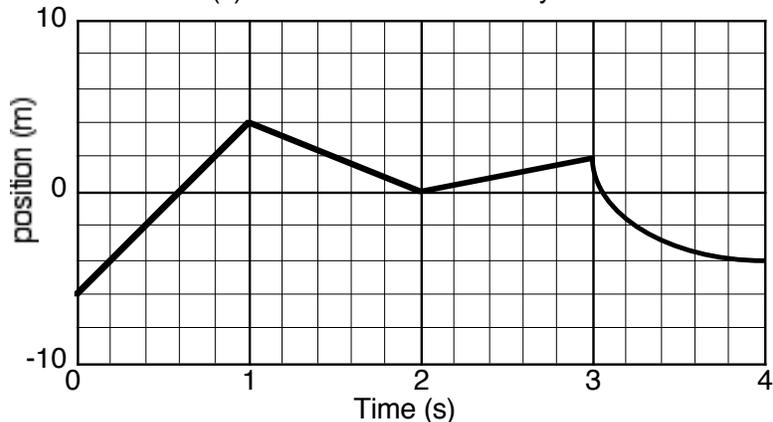
# Kinematics Graphs Worksheet



- 110. Which single second time interval(s) contains a constant velocity?
- 111. Which single second time interval(s) contains a positive acceleration?
- 112. Which single second time interval(s) contains a non-zero velocity?
- 113. Which single second time interval(s) contains a positive velocity?



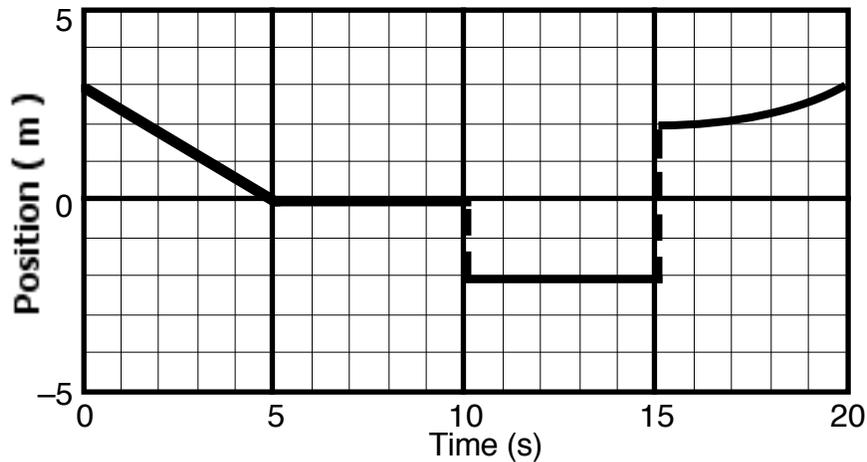
- 114. Which single second time interval(s) contains a positive velocity?
- 115. Which single second time interval(s) contains a negative acceleration?
- 116. Which single second time interval(s) contains constant velocity?



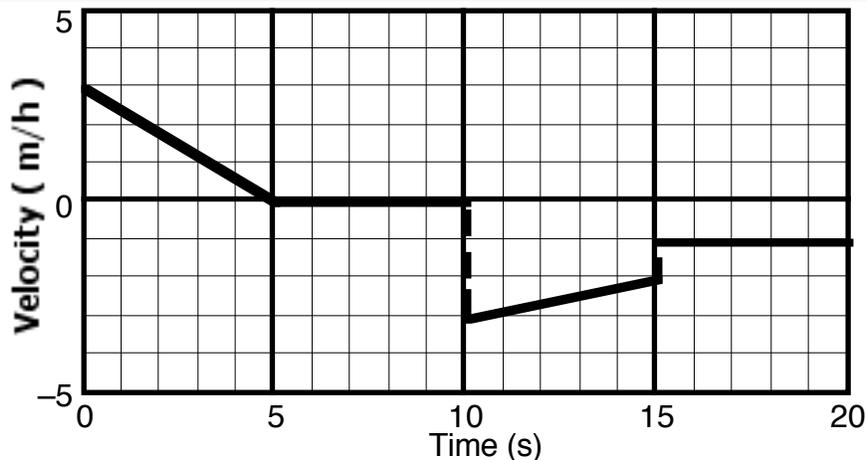
- 117. Which single second time interval(s) contains a positive velocity?
- 118. Which single second time interval(s) contains a negative acceleration?
- 119. What is the velocity at 3.5 seconds?
- 120. What is the displacement from 1 to 4 seconds?
- 121. What is the displacement from 0 to 2 seconds?

# Kinematics Graphs Worksheet

- 200 What does the word "constant" mean?  
 201 How can you tell when a piece of a graph on an  $x$  vs  $t$  graph is showing a constant velocity?  
 202 How can you tell when a piece of a graph on a  $v$  vs  $t$  graph is showing a constant velocity?  
 203 How can you tell when a piece of an  $x$  vs  $t$  graph is showing an acceleration of zero?

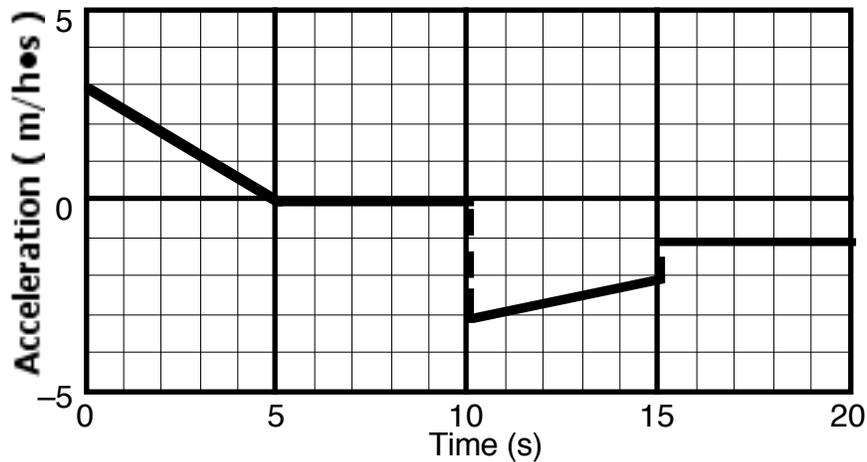


- 204 Which 5 second interval(s) show a negative velocity?  
 205 Which 5 second interval(s) show a positive acceleration?  
 206 Which 5 second interval(s) show a velocity that is constant?  
 207 Which 5 second interval(s) show a velocity of zero?  
 208 What is the velocity at 6 seconds?  
 209 What is the velocity at 19 seconds?  
 210 What is the displacement from 5 to 15 seconds?  
 211 What are the units of slope from the graph above?

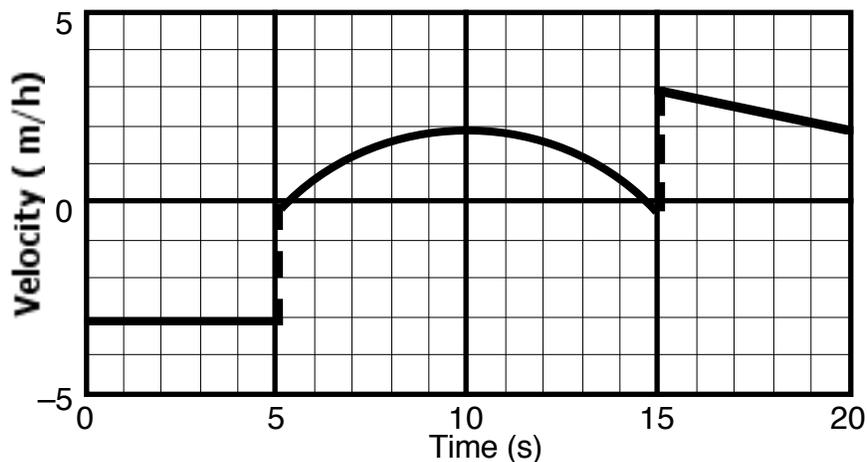


- 212 Which 5 second interval(s) show a negative velocity?  
 213 Which 5 second interval(s) show a positive acceleration?  
 214 Which 5 second interval(s) show a velocity that is constant?  
 215 Which 5 second interval(s) show a velocity of zero?  
 216 What is the velocity at 6 seconds?  
 217 What is the velocity at 19 seconds?  
 218 What are the units of slope from the graph above?

# Kinematics Graphs Worksheet



- 219 Which 5 second interval(s) show a positive acceleration?
- 220 Which 5 second interval(s) show a negative acceleration?
- 221 Which 5 second interval(s) show a negative jerk?
- 222 Which 5 second interval(s) show a constant acceleration?
- 223 Which 5 second interval(s) show an acceleration of zero?
- 224 Which 5 second interval(s) show a jerk equal to zero?
- 225 What are the units of slope from the graph above?
- 226• Which 5 second interval(s) show a positive change in velocity?
- 227• Which 5 second interval(s) show no change in velocity?



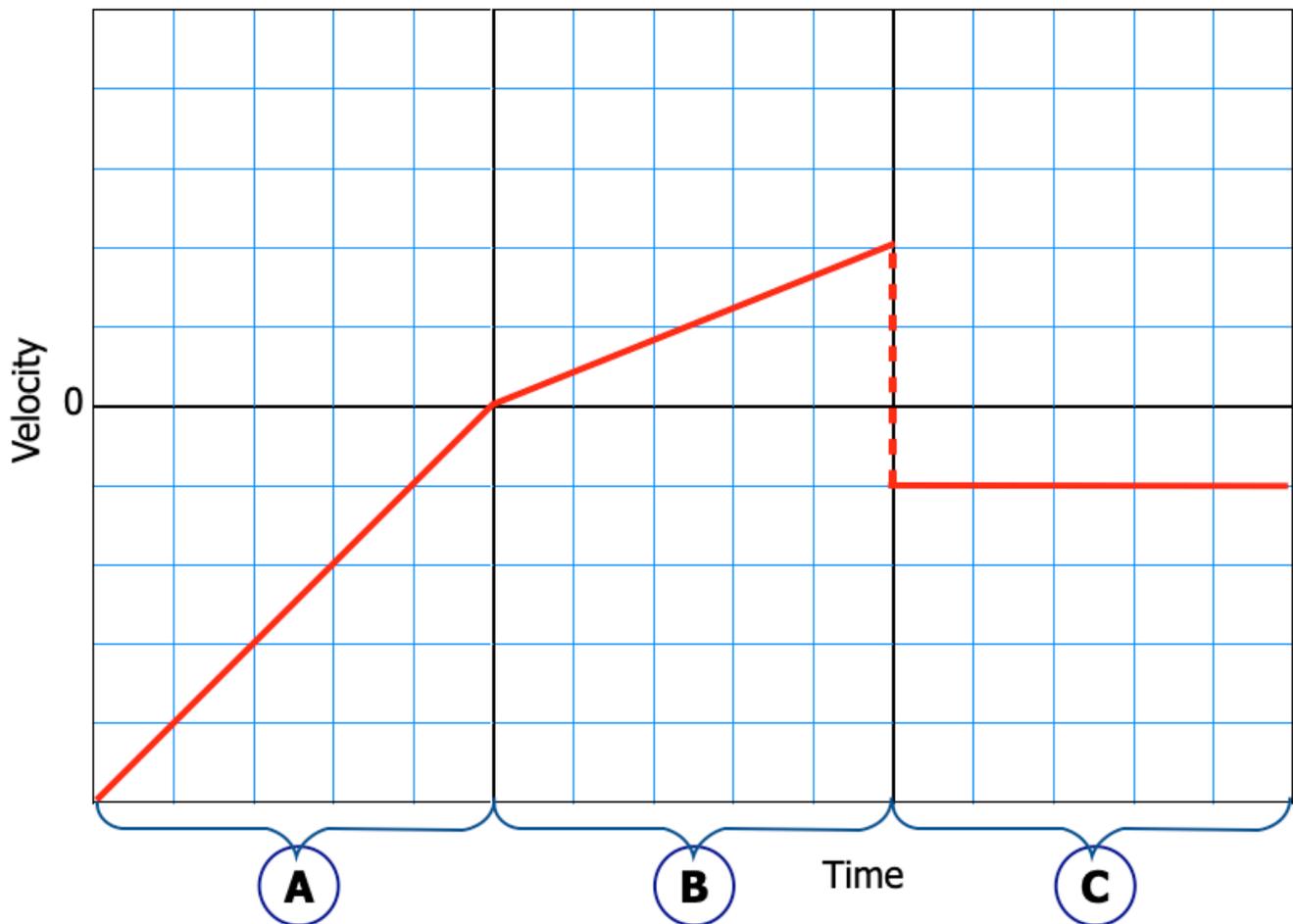
- 228 Which 5 second time interval(s) contains positive jerk?
- 229 Which 5 second interval(s) show a positive velocity?
- 230 Which 5 second interval(s) show a positive acceleration?
- 231 What is the acceleration at 17 seconds?
- 232 Which 5 second interval(s) show a negative velocity?
- 233 Which 5 second time interval(s) shows a negative acceleration and a positive velocity?
- 234• What is the displacement from 0 to 5 seconds?
- 235• What is the displacement from 15 to 20 seconds?
- 236• Which section contains a positive displacement and a negative acceleration that is changing?

# Kinematics Graphs Worksheet

# Concepts

Use the graph below to answer these questions

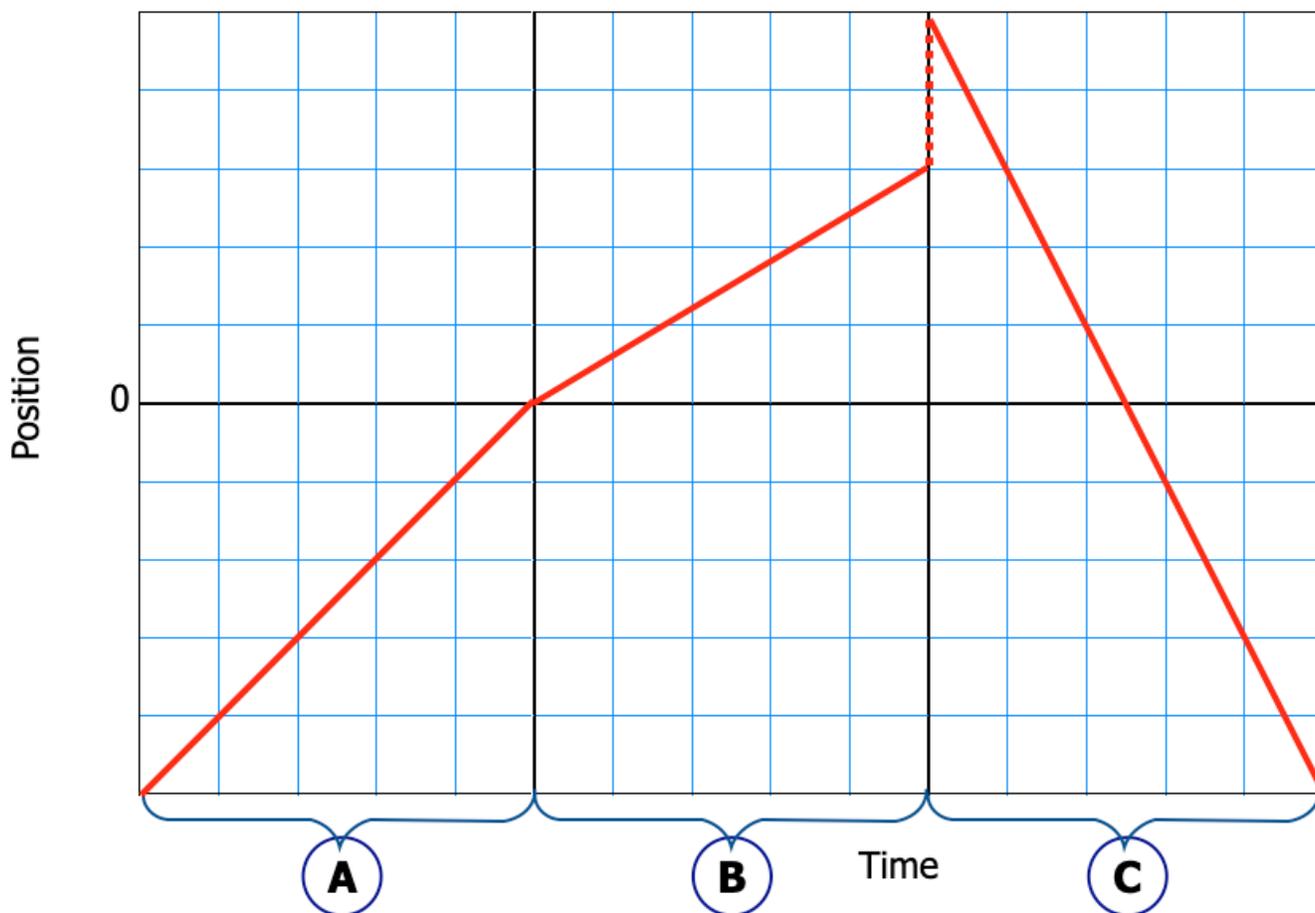
750. Which lettered time interval has the largest velocity?
751. Which lettered has the largest absolute value of displacement?



# Kinematics Graphs Worksheet

Use the graph below to answer these questions

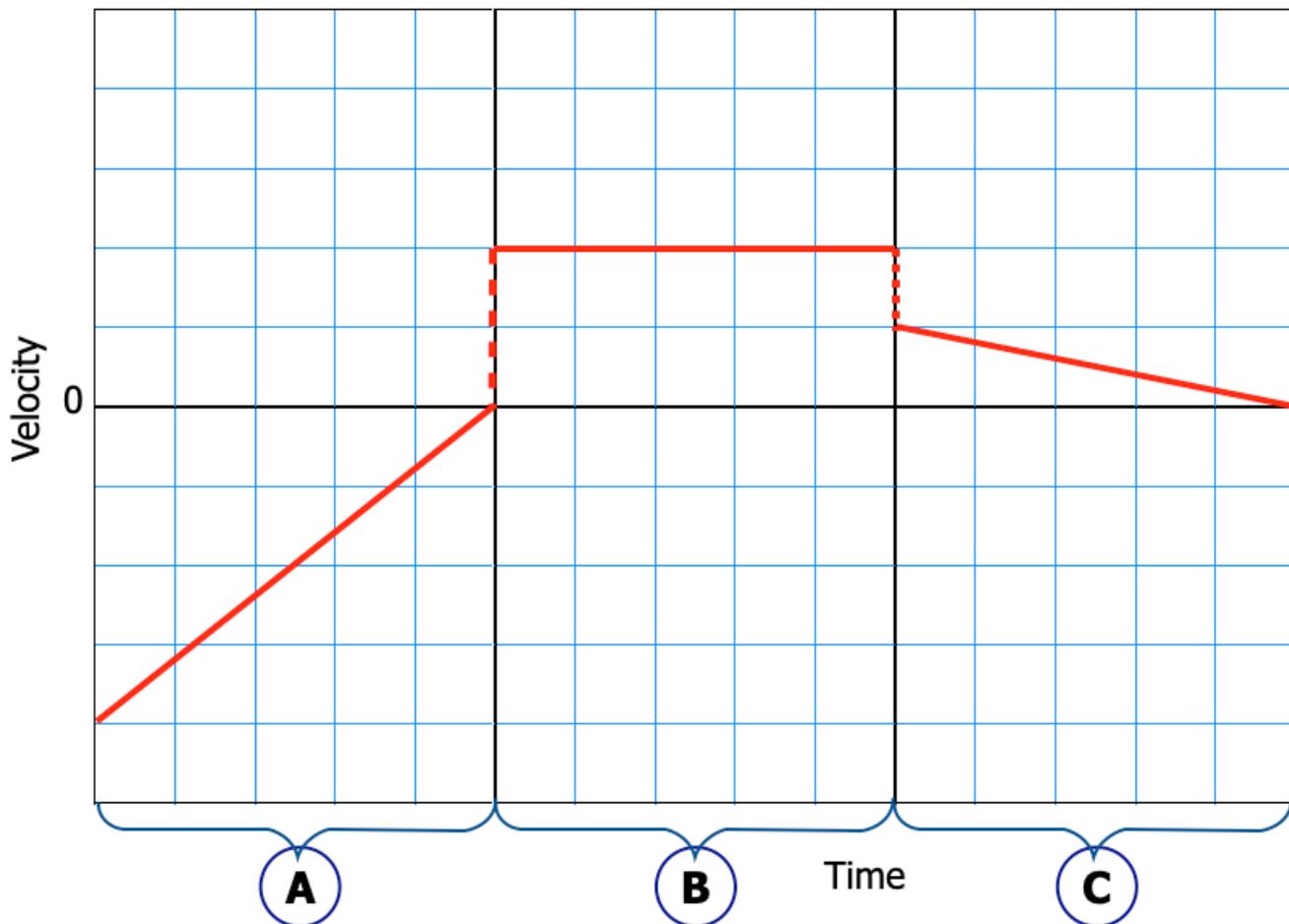
752. Which lettered time interval has the velocity with the greatest magnitude? ("Magnitude," is like absolute value.)
753. Which lettered time interval has the largest displacement magnitude?



# Kinematics Graphs Worksheet

Use the graph below to answer these questions

754. Which lettered interval has the largest positive velocity?
755. Which lettered interval has the largest negative acceleration?
756. Which lettered interval has the greatest positive displacement?



# Kinematics Graphs Worksheet

Use the graph below to answer these questions

757. Which letters time interval has the largest negative velocity?

758. Which lettered time interval has the largest displacement magnitude?

759. Which lettered time interval has a velocity of zero?

